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JAMES M. STOVER			TO, BAOTRAN N	
NCR CORPORATION 1700 SOUTH PATTERSON BLVD, WHQ4 DAYTON, OH 45479			ART UNIT	PAPER NUMBER
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Commissioner for Patents United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

# BEFORE THE BOARD OF PATENT APPEALS **AND INTERFERENCES**

Application Number: 09/779,866 Filing Date: February 08, 2001 Appellant(s): PRICER, JAMES E. MAILED

AUG 1 0 2006

**Technology Center 2100** 

Howard L. Speight For Appellant

**EXAMINER'S ANSWER** 

This is in response to the appeal brief filed 05/18/2006 appealing from the Office action mailed 10/20/2004.

#### (1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

# (2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The statement of the status of claims contained in the brief is correct.

# (4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

# (5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

# (6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct. However, the status of Claims as been changed, as follows:

Claims 1-6, 20 and 22 are rejected under Lazarus and in combination with Miller.

Claims 7-13 and 23 are objected.

Claims 14-19 and 24-27 are allowed over the prior art of record.

# (7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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#### (8) Evidence Relied Upon

6,430,539	Lazarus et al	05/06/99
5,974,396	Anderson et al	07/19/96
6,611,829	Tate et al	10/01/99
WO 00/20998	Miller et al	10/01/99

# (9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

#### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent or granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1-4, 6, 20 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6430539 issued to Lazarus et al (filed 5/6/99), herein referred to as Lazarus.

Referring to Claims 1 and 20:

Lazarus discloses a method for use in analyzing associations in the sequence of transactions, the method comprising: loading data from the transactions into a database system, where the data includes an entry for each transaction (col. 10, lines 40-50) and the transactions are grouped into sessions (col. 3, lines 25-35); ordering the transactions in sequence within each session (col. 3, lines 28-33); and performing an analysis of the sessions of transactions to find associations in the sequence of the transactions in the sessions (col. 4, lines 45-50; col. 5, lines 15-25, 50-55).

#### Referring to Claim 2:

Lazarus discloses the limitations of Claim 1 above. Lazarus further discloses wherein the data for each transaction includes a time stamp related to a time that the transaction occurred (col.14, lines 30-35; Table 3) and wherein ordering the transactions comprises numbering the transactions based on the time stamps included in the data for the transactions (col. 3, lines 20-40).

#### Referring to Claim 3:

Lazarus discloses the limitations of Claim 2 above. Lazarus further discloses wherein numbering the transactions comprises numbering the transactions in sequence from the transaction having the earliest time stamp to the transaction having the latest time stamp (col. 3, lines 30-40).

#### Referring to Claim 4:

Lazarus discloses the limitations of Claim 1 above. Lazarus further discloses wherein loading the data from the transactions into the database system comprises parsing the data for each transaction into fields in the database system (col. 14, lines 20-50); and identifying one of the fields as a session identifier field where a session identifier for each transaction is stored (col. 14, lines 59-60, Account id, pop id, Table 4).

#### Referring to Claim 6:

Lazarus discloses the limitations of Claim 1 above. Lazarus further discloses wherein performing the analysis comprises performing an affinity (relationship) analysis (col. 4, lines 45-60; col. 5, lines 15-25, 50-55).

#### Referring to Claim 22:

Lazarus discloses the limitations of Claim 1 above. Lazarus further discloses where each entry includes a time stamp related to a time that the transaction occurred (col. 14, lines 25-35, Table 3) and where, in selecting sessions, the computer selects entries with time stamps lying in a predetermined range (col. 3, lines 25-45).

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6430539 issued to Lazarus et al (filed 5/6/99), herein referred to as Lazarus further in view of US 5974396 issued to Anderson et al (filed 7/19/96), herein referred to as Anderson.

#### Referring to Claim 5:

Lazarus discloses the limitations of Claim 4 above. Lazarus does not explicitly disclose "wherein loading the data from the transactions into the database system further comprises identifying one of the fields as an item identifier field where an item identifier for each transaction is stored".

Anderson discloses wherein loading the data from the transactions into the database system further comprises identifying one of the fields as an item identifier field where an item identifier for each transaction is stored (col. 10, lines 10-30).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify Lazarus such that the master file database includes an item identifier for each transaction. One of ordinary skill in the art would have been motivated to do this because it would allow the system to query the database for a particular item/product cluster (col. 10, lines 40-60).

# (10) Response to Argument

Response to Appellant's traversal of the 35 USC 102 (e) rejection for claims 1-4, 6, 20 and 22:

A. Appellant stated that Lazarus does not discuss transactions that are grouped into sessions and also gave an example from the specification of US Patent Publication 2002/0143925. This US Pat. Pub. is listed on page 2 lines 4-7 in the present application.

Appellant cited the above US Pat. Pub. as a copending application, not incorporated by reference, thus, the content of this US Pat. Pub., i.e., "After parsing the Web-log data extracting the desires information, the DBMS identifies all Web-log entries associated with a an individual user session (step 315.). One the technique from doing so involves identifying all entries that list a single user-ID code and then selecting from these the entries with data-and-time stamps that differ by less than some prescribed amount" is not a part of the specification of the present application. This content is not read into the appealed claims or used as to interpret the claimed limitations. Thus, the claimed transactions are grouped into sessions is not binding to the interpretation as the appellant alleged. Lazarus discloses a number of transactions in a time interval, or other sequence related criteria, which are read on the claimed transactions grouped into sessions. Therefore, Lazarus anticipates the grouping transactions into sessions.

According to Lazarus, the analysis of consumer spending uses spending data and processes that data are identified co-occurrences of purchases within co-

occurrence windows, which may be based on either a number of transactions, a time interval, or other sequence related criteria, columns 3, lines 27-41. Thus, Lazarus teaches the ability to group transactions into a time interval, i.e., session. In addition, Lazarus teaches in col. 28, lines 35-47, that consumer transaction data is organized in groups of observations. Each observation is associated with a selected end-date, i.e., session. The end-date divides the observation into a prediction window and an input window. The input window includes a set of transactions in a defined past time interval prior to the selected end-date (e.g. 6 months prior). Thus, Lazarus anticipates the claimed loading data from the transactions into a database system where the data includes an entry (identifying entries of spending data) for each transaction and the transactions are grouped into sessions (e.g. 6 months or 3 months).

B. The appellant stated that Lazarus does not disclose performing an analysis of the sequence of transaction to find association in the sequence of transaction in the session as recited in claims 1 and 20.

According to Lazarus in column 3, lines 27-41, the transactions are grouped into the time interval sessions or other grouping parameters. Lazarus also discloses that learning the relationships between merchants in transaction data, and defining vectors, which represent the merchants. Identifies and captures the patterns of spending behavior (sequence of transaction data) is defined, col. 5, lines 15- 25. For example, a new mother will likely shop at children's clothes, toy stores and others similar

merchants, whereas a single young male will likely not shop at these types of merchant (col. 5, lines 31-35). In addition, Lazarus teaches that the co-occurrence windows (a number of transactions) are used to derive measures of how closely related any two merchants are based on their frequencies of co-occurrence of each other, col. 10, lines 51-64. Thus, this implies that the association of spending data in Lazarus is analyzed to find the co-occurrence buying pattern to predict further course of action, which is benefit to the merchant advertising processes. Therefore, Lazarus teaches the claimed limitation of "performing an analysis of the sessions of transaction to find association in the sequence of the transaction in the sessions".

Response to Appellant's traversal on dependent claims 2-6 and 22:

As appellant acknowledges that dependent Claims 2-6 and 22 include at least one of the limitations discussed above thus maintain the rejection of their independent Claims.

With respect to Claims 7-19 and 23-27, appellant's arguments are persuasive, thus the subject matters in Claims 7-19 and 23-27 are defined over the prior art Lazarus, or in combination with Miller.

# (11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Baotran To B T 07/26/2006

Conferees:

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